DC Interaction Trigger

- For each plane in DC1 there are 32 groups of 16 wires that are discriminated and used to form the interaction trigger

- Have TDC information for plane 4 which is now part of the offline data format

- DC 1+ interaction trigger requires >1 hit in 3/4 planes

- A hit is one hit wire in one of the 32 groups within an 80 ns window

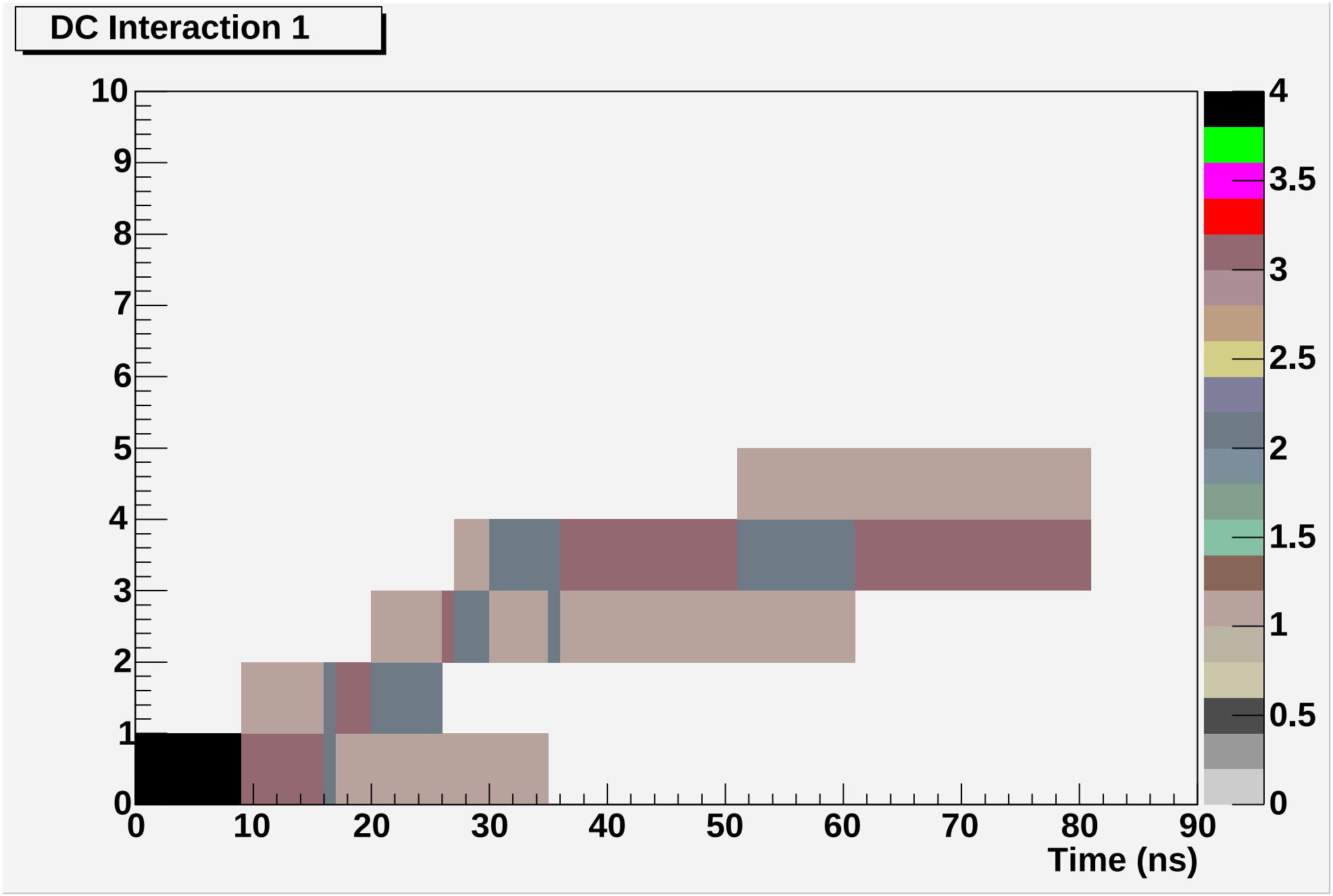
Goal

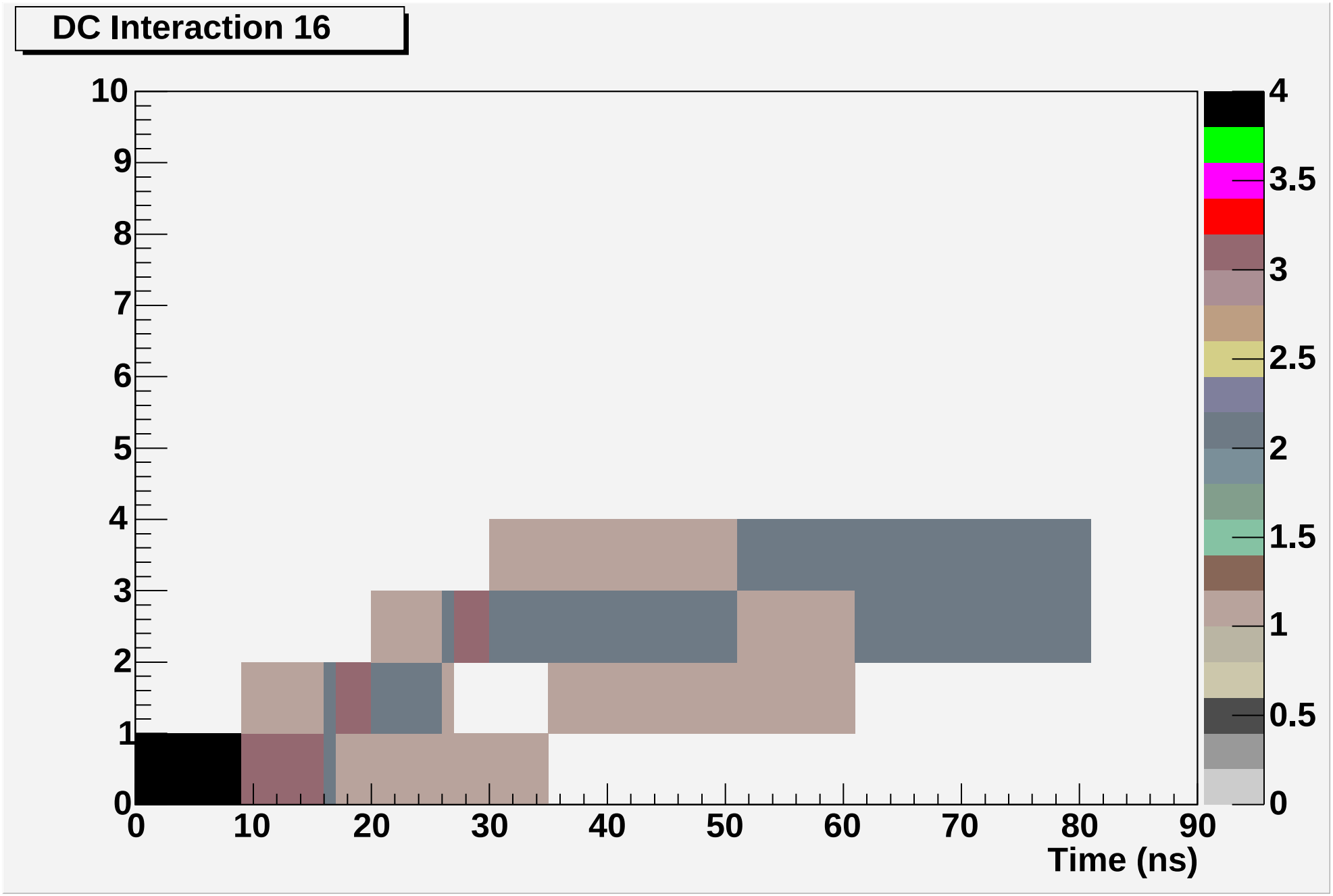
- Determine effects of shortening the window
  - (i.e. How many interactions do we lose?)

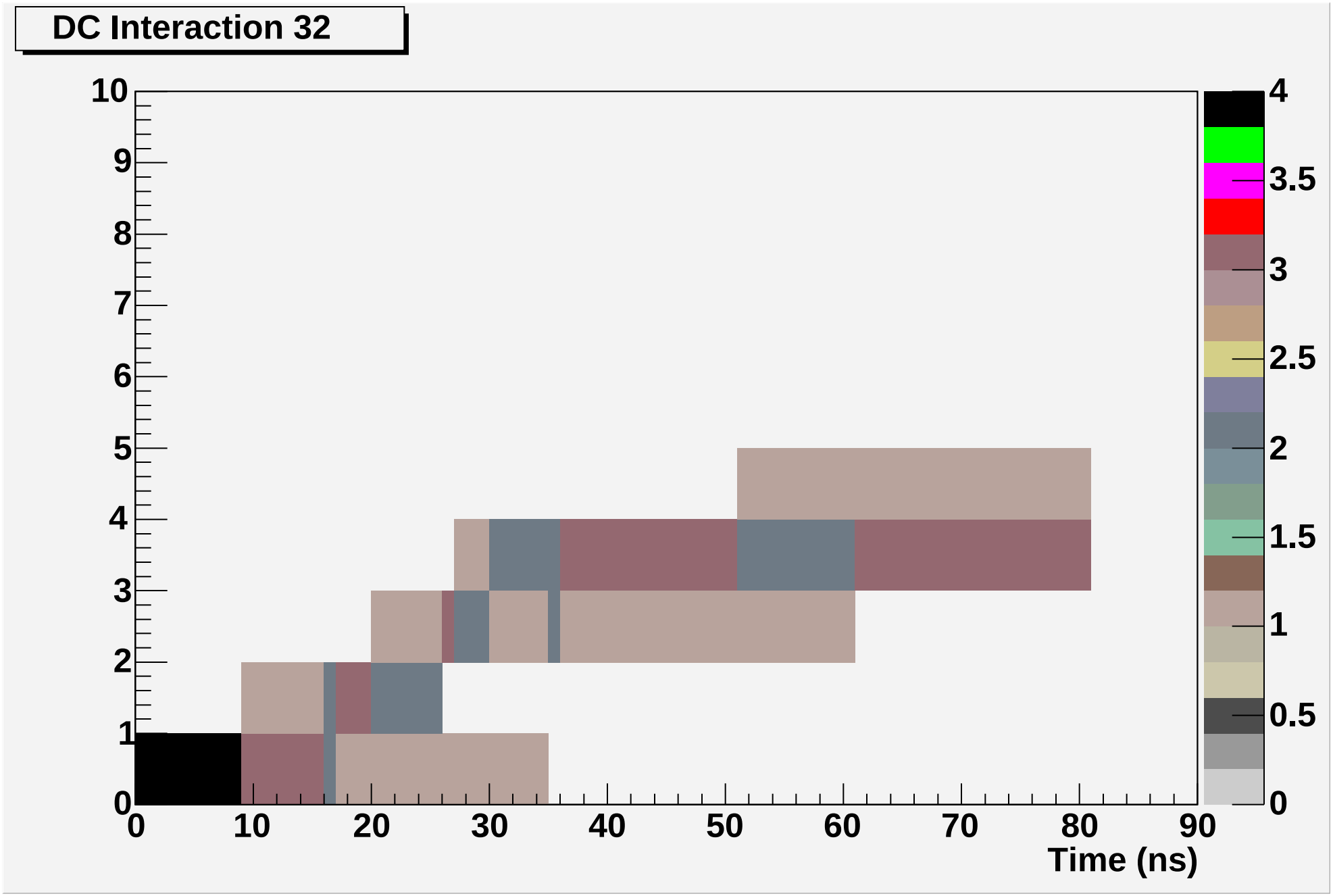
- Select interaction events where plane 4 contributed
  (i.e. No more than 2 of first 3 planes w/ >1 hit)

- For each TDC channel, find how many of the other channels were hit

- Accumulate these hits over the 80 ns window


DC Interaction 1
10
9
8
7
6
5
4
3
2
1
0
0
10
20
30
40
50
60
70
80
90
Time (ns)
4
3.5
3
2.5
2
1.5
1
0.5
0


DC Interaction 16
10
9
8
7
6
5
4
3
2
1
0
0
10
20
30
40
50
60
70
80
90
Time (ns)
4
3.5
3
2.5
2
1.5
1
0.5
0


DC Interaction 32
10
9
8
7
6
5
4
3
2
1
0
0
10
20
30
40
50
60
70
80
90
Time (ns)
4
3.5
3
2.5
2
1.5
1
0.5
0